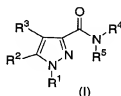


## WHAT IS CLAIMED IS:

1. A compound of structural formula I:



or a pharmaceutically acceptable salt or solvate thereof, wherein

each n is independently 0, 1, or 2;

R<sup>1</sup> is hydrogen or C<sub>1-4</sub> alkyl, wherein alkyl is unsubstituted or substituted with hydroxy or one to three fluorines;

R<sup>2</sup> is C<sub>1-4</sub> alkyl, aryl, arylmethyl, heteroaryl, or heteroarylmethyl, wherein aryl and heteroaryl are unsubstituted or substituted with one to four R<sup>6</sup> substituents;

R<sup>3</sup> is hydrogen, halogen, or C<sub>1-4</sub> alkyl, wherein alkyl is unsubstituted or substituted with hydroxy or one to three fluorines;

R<sup>4</sup> is hydrogen or C<sub>1-4</sub> alkyl;

R<sup>5</sup> is (CH<sub>2</sub>)<sub>n</sub>aryl, (CH<sub>2</sub>)<sub>n</sub>C<sub>4-9</sub> cycloalkyl, (CH<sub>2</sub>)<sub>n</sub>C<sub>5-11</sub> bicycloalkyl, or (CH<sub>2</sub>)<sub>n</sub>C<sub>10-14</sub> tricycloalkyl; wherein said aryl, cycloalkyl, bicycloalkyl, and tricycloalkyl are unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, trifluoromethyl, and C<sub>1-4</sub> alkyl;

or R<sup>4</sup> and R<sup>5</sup> together with the nitrogen atom to which they are attached form a 5- to 7-membered ring saturated heterocycle optionally containing an additional heteroatom selected from O, S, and NC<sub>0-4</sub> alkyl wherein said heterocycle optionally fused with a benzene ring and wherein said heterocycle or optionally benzo-fused heterocycle is unsubstituted or substituted with one to three substituents independently selected from halogen, C<sub>1-4</sub> alkyl, trifluoromethyl, and (CH<sub>2</sub>)<sub>n</sub>aryl wherein aryl is unsubstituted or substituted with one to three substituents independently selected from halogen and C<sub>1-4</sub> alkyl;

or R<sup>4</sup> and R<sup>5</sup> together with the nitrogen atom to which they are attached form a C<sub>6-11</sub> azabicyclic ring system optionally containing an additional heteroatom selected from O, S, and NC<sub>0-4</sub> alkyl said azabicyclic ring being unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, and C<sub>1-4</sub> alkyl; and

each R<sup>6</sup> is independently selected from the group consisting of: amino, C<sub>1-4</sub> alkylamino, di(C<sub>1-4</sub> alkyl)amino, halogen, cyano, C<sub>1-4</sub> alkyl, hydroxy, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> alkylthio, C<sub>1-4</sub> alkylsulfonyl, trifluoromethyl, trifluoromethoxy, aryl, and heteroaryl;

wherein aryl and heteroaryl are unsubstituted or substituted with one to three substituents independently selected from cyano, halogen, hydroxy, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> alkyl, trifluoromethyl, and trifluoromethoxy.

- 5                    2.     A compound of Claim 1 wherein R<sup>1</sup> is hydrogen.
3.     A compound of Claim 2 wherein R<sup>3</sup> is hydrogen, halogen or methyl.
4.     A compound of Claim 2 wherein R<sup>2</sup> is aryl or heteroaryl, wherein aryl and  
10 heteroaryl are unsubstituted or substituted with one to three R<sup>6</sup> substituents.
5.     A compound of Claim 4 wherein R<sup>2</sup> is phenyl which is unsubstituted or  
substituted with one to three R<sup>6</sup> substituents.
- 15                   6.     The compound of Claim 1 wherein n is 0, R<sup>4</sup> is hydrogen or methyl and R<sup>5</sup> is  
C<sub>4-9</sub> cycloalkyl, C<sub>5-11</sub> bicycloalkyl or C<sub>10-14</sub> tricycloalkyl; wherein said cycloalkyl, bicycloalkyl, and  
tricycloalkyl are unsubstituted or substituted with one to three substituents independently selected from  
halogen, hydroxy, trifluoromethyl, and C<sub>1-4</sub> alkyl.
- 20                   7.     A compound of Claim 6 wherein R<sup>1</sup> is methyl; R<sup>2</sup> is aryl or heteroaryl, wherein  
aryl and heteroaryl are unsubstituted or substituted with one to three R<sup>6</sup> substituents; and R<sup>3</sup> is hydrogen,  
methyl or chlorine.
8.     A compound of Claim 1 wherein R<sup>4</sup> and R<sup>5</sup> together with the nitrogen atom to  
25 which they are attached form a 5- to 7-membered ring saturated heterocycle optionally containing an  
additional heteroatom selected from O, S, and NC<sub>0-4</sub> alkyl wherein said heterocycle optionally fused  
with a benzene ring and wherein said heterocycle or optionally benzo-fused heterocycle is unsubstituted  
or substituted with one to three substituents independently selected from halogen, C<sub>1-4</sub> alkyl,  
trifluoromethyl, and (CH<sub>2</sub>)<sub>n</sub>aryl wherein aryl is unsubstituted or substituted with one to three  
30 substituents independently selected from halogen and C<sub>1-4</sub> alkyl.
9.     The compound of Claim 8 wherein R<sup>1</sup> is methyl; R<sup>2</sup> is aryl or heteroaryl,  
wherein aryl and heteroaryl are unsubstituted or substituted with one to three R<sup>6</sup> substituents; and R<sup>3</sup> is  
hydrogen, methyl or chlorine.

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10. The compound of Claim 1 wherein R<sup>4</sup> and R<sup>5</sup> together with the nitrogen atom to which they are attached form a C<sub>6-11</sub> azabicyclic ring system optionally containing an additional heteroatom selected from O, S, and NC<sub>0-4</sub> alkyl said azabicyclic ring being unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, and C<sub>1-4</sub> alkyl.

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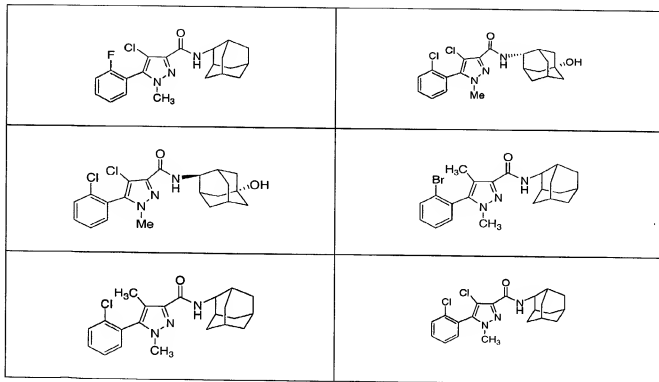
11. The compound of Claim 10 wherein R<sup>1</sup> is methyl, R<sup>2</sup> is aryl or heteroaryl, wherein aryl and heteroaryl are unsubstituted or substituted with one to three R<sup>6</sup> substituents, and R<sup>3</sup> is hydrogen, methyl or chlorine.

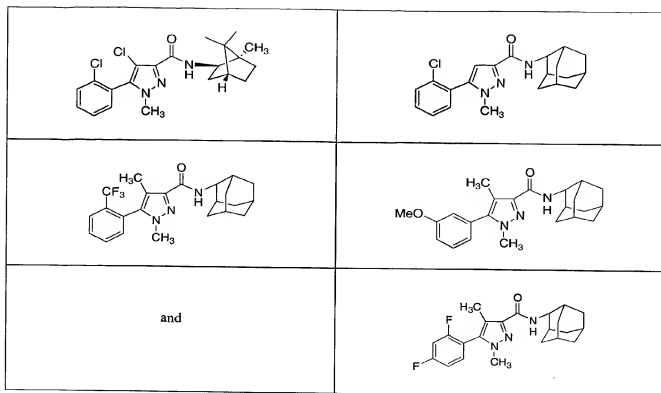
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12. The compound of Claim 1 wherein R<sup>1</sup> is methyl; R<sup>2</sup> is aryl or heteroaryl, wherein aryl and heteroaryl are unsubstituted or substituted with one to three R<sup>6</sup> substituents; R<sup>3</sup> is hydrogen, methyl or chlorine; R<sup>4</sup> is hydrogen; and R<sup>5</sup> is adamantyl or bicyclo[2.2.1]heptyl, unsubstituted or substituted with one to three substituents independently selected from methyl, hydroxy, and halogen.

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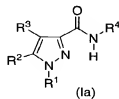
13. A compound in accordance with claim 1 selected from the group consisting of:























or a pharmaceutically acceptable salt or solvate thereof.

14. A compound in accordance with claim 1 selected from the following table:



Ex.	R <sup>1</sup>	R <sup>2</sup>	R <sup>3</sup>	R <sup>4</sup>
3	Me	2-F-phenyl	Cl	
4	Me	2-Br-phenyl	Me	
5	Me	2-Cl-phenyl	Me	

6	Me	2-Cl-phenyl	Cl	
7	Me	2-Cl-phenyl	Cl	
8	Me	2-Cl-phenyl	H	
9	Me	2-CF <sub>3</sub> -phenyl	Me	
10	Me	3-OMe-phenyl	Me	
11	Me	2,4-di-F-phenyl	Me	
12	Me		Me	
13	Me	2-Me-phenyl	Me	
14	Me		Me	
15	Me	2-F-phenyl	Cl	
16	Me	4-OCF <sub>3</sub> -phenyl	Cl	
17	Me	2-Cl-phenyl	Cl	
18	CH(CH <sub>3</sub> ) <sub>2</sub>	4-Cl-phenyl	Me	
19	CH <sub>2</sub> CF <sub>3</sub>	4-Cl-phenyl	Me	
20	H	4-Cl-phenyl	Cl	
21	Me	Benzyl	Me	

or a pharmaceutically acceptable salt or solvate thereof.

15. A pharmaceutical composition comprising a compound in accordance with Claim 1 in combination with a pharmaceutically acceptable carrier.

16. A method of treating hyperglycemia, diabetes or insulin resistance in a mammalian patient in need of such treatment which comprises administering to said patient an effective amount of a compound in accordance with Claim 1.

17. A method of treating non-insulin dependent diabetes mellitus in a mammalian patient in need of such treatment comprising administering to the patient an anti-diabetic effective amount of a compound in accordance with Claim 1.

18. A method of treating obesity in a mammalian patient in need of such treatment comprising administering to said patient a compound in accordance with Claim 1 in an amount that is effective to treat obesity.

19. A method of treating Syndrome X in a mammalian patient in need of such treatment, comprising administering to said patient a compound in accordance with Claim 1 in an amount that is effective to treat Syndrome X.

20. A method of treating a lipid disorder selected from the group consisting of dyslipidemia, hyperlipidemia, hypertriglyceridemia, hypercholesterolemia, low HDL and high LDL in a mammalian patient in need of such treatment, comprising administering to said patient a compound in accordance with Claim 1 in an amount that is effective to treat said lipid disorder.

21. A method of treating atherosclerosis in a mammalian patient in need of such treatment, comprising administering to said patient a compound in accordance with Claim 1 in an amount effective to treat atherosclerosis.